Contact

Ostenbergstraße 109, 44227
Dortmund, Germany
+4917673209858 (Mobile)
ammar.tauqir2@gmail.com

www.linkedin.com/in/muhammad-
ammar-tauqir-5754339b (LinkedIn)
ammartauqir2.wixsite.com/resume
(Portfolio)

Top Skills

Computer Science
Software Design
Engineering

Languages

German (Limited Working)
Urdu (Native or Bilingual)
English (Native or Bilingual)

Honors-Awards

Technology AWARD
Award for Research Project Poster
Presentation
FIRST PRIZE Winner 2021

Publications

PERFORMANCE ANALYSIS OF
MILLIMETER WAVE IN SATELLITE-
EARTH SYSTEMS
Perception vs. Reality - Never
Believe in What You See
DESIGN OF AN AUTONOMOUS
SURVEILLANCE QUAD COPTER
COMPARATIVE ANALYSIS OF
MOTION PLANNING TECHNIQUES
FOR AUTONOMOUS MOBILE
ROBOTS

Muhammad Ammar Tauqir

Software Engineer at E.Solutions GmbH
Ingolstadt, Bavaria, Germany

Summary

In October 2018, I started my masters in Automation and Robotics
at TU Dortmund and in parallel I joined "Logistics Innovation Lab" as
a Student Research Assistant. There I have been working on indoor
3D localization of a logistic hall, using multiple monocular RGB
cameras. Most of my work there is in Python and Linux developing
environment. As a semester project, I also had a chance to work
on the in door localization using ZED stereo vision camera, while
making use of modern deep learning based classifiers. I did my
Master thesis on LIDAR semantic segmentation for road scene
understanding at CONTINENTAL AG.

Experience

e.solutions GmbH
2 years 7 months

Software Developer
December 2024 - Present (6 months)
Ingolstadt, Bavaria, Germany

Development for automotive infotainment systems

Software Test Engineer
November 2022 - November 2024 (2 years 1 month)
Ingolstadt, Bavaria, Germany

ALTEN GmbH / ALTEN SW GmbH
Engineering Consultant
November 2021 - November 2022 (1 year 1 month)
Ingolstadt, Bavaria, Germany

Working on the software development of automotive infotainment systems
while being deployed at E_Solutions GmbH.

Continental

10 months

Project Engineering Intern
May 2021 - August 2021 (4 months)
Neu-Ulm, Bavaria, Germany

Master Thesis
November 2020 - May 2021 (7 months)
Germany

Worked on LIDAR application of 3D point-cloud semantic segmentation for fine grained road scene understanding. Got a chance to work on state-of-the-art Machine Learning frameworks, deep architectures, modern datasets, algorithm and product development pipeline.

TU Dortmund University
Graduate Research Assistant
March 2019 - March 2021 (2 years 1 month)
Germany

Working on the development of Computer Vision based multi-camera 3D localization system for large logistic halls, potent to replace the IR camera based system. I got to work on modern AI algorithms for high speed image classification and 3D image projections. Python development environment was mostly used.

Please visit the attached link to get a bird-eye view of the project. Thank you very much for your Interest.

Aviacell Gmbh
Embedded Engineer
August 2017 - October 2018 (1 year 3 months)
Germany

Worked as Embedded engineer for the development of Advance Drivers Assistance system (ADAS) for vehicles. I have been involved at all levels of the project development ranging from Algorithm design to their embedded implementation. Most of the work was on C or C++ development environment on both Windows and Linux OS. I got the chance to accumulate some hands on experience of NXP, Infineon, Rpi and Odroid embedded hardware. I also worked with CAN communication protocol and used tools like CANoe and CANalyzer.

Thank you for your interest.

Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)
Intern
April 2017 - July 2017 (4 months)
Lahore, Pakistan

Project: Performance Analysis of Millimeter Wave in Satellite-Earth Systems
Description:
Usually satellite-earth link budget calculation does not incorporate these attenuation effects for millimeter waves the inclusion of these attenuations is unavoidable. In this paper we extend ITU model to millimeter waves and evaluate the performance of LEO Satellite-Earth systems for rain, cloud and gas attenuations. We elaborate the modeled system's various interdependent behaviors for key transmission parameters, satellite-ground station parameters and for atmospheric parameters with meticulous analysis and discussions. Performance of the complete Satellite-Earth System is also simulated for evaluating Eb/No and Bit Error Rate result has been obtained. Finally, the diversity analysis is studied and results are plotted.

Publication link: http://search.ijcsns.org/07_book/html/201707/201707037.html

---

Education

TU Dortmund University
Master's degree, Robotics, and Automation Engineering · (2018 - 2020)

University of the Punjab
Bachelor's degree, Electrical and Electronics Engineering · (2012 - 2016)